

Figure 3B schematically illustrates a cross-sectional view of another embodiment of an illumination assembly according to the invention.

Figure 3C schematically illustrates a cross-sectional view of another embodiment of an illumination assembly according to the invention.

5 Figure 4 schematically illustrates a top plan view of a substrate for use with flip-chip-like LEDs.

Figure 5 schematically illustrates a cross-sectional view taken along line 5-5 of FIG. 4.

Figure 6 schematically illustrates a top plan view of another substrate embodiment for use with wirebonded LEDs.

10 Figure 7 schematically illustrates a cross-sectional view taken along line 7-7 of FIG. 6.

Figure 8 schematically illustrates a top plan view of another embodiment of a substrate for use with an illumination assembly according to the invention.

Figure 9 schematically illustrates a cross-sectional view taken along line 9-9 of Fig 8.

15 Figures 10A-C schematically illustrate an embodiment of an illumination assembly using multilayer optical film.

Figures 11A-C schematically illustrate an embodiment of a shaped illumination assembly according to the invention.

Description of the Preferred Embodiments

20 In the following detailed description of the preferred embodiments, reference is made to the accompanying drawings, which form a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. It is to be understood that other embodiments may be utilized and structural or logical changes may be made without departing from the scope of the present invention. The following detailed
25 description, therefore, is not to be taken in a limiting sense, and the scope of the present invention is defined by the appended claims.

As used herein, LED dies include, but are not limited to, light emitting elements such as light emitting diodes (LEDs), laser diodes, and super-radiators, to name a few. LED dies